

## **ADULT INTRAOSSEOUS (IO) PROTOCOL INTRAOSSEOUS CANNULATION**

### **PRACTITIONER QUALIFICATIONS:**

1. Only paramedics may initiate an adult or older child IO(7-12 years).
2. Training on IO cannulation of the proximal tibia (medial aspect).
3. Demonstration of competency in the skill in a training setting.

### **TO QUALIFY FOR ADULT INTRAOSSEOUS CANNULATION, THE PATIENT MUST MEET ALL OF THE FOLLOWING CRITERIA:**

1. Have a very unstable, life threatening situation.
2. The paramedic is unable to establish IV access after two attempts or 90 seconds of searching for a suitable vein.

### **SITE OF CANNULATION:**

1. All ages: proximal tibia/medial aspect.

### **EQUIPMENT FOR IO CANNULATIONS:**

1. Alcohol and/or iodine preps
2. Saline for irrigation
3. IV administration set
4. Tape
5. 10cc syringe
6. Age appropriate IO injection device: Any FDA approved IO device may be used consistent with manufacturer specifications and instructions.

### **PROCEDURE FOR IO CANNULATION**

1. Prepare the infusion setup.
2. Externally rotate and splint leg.
3. Palpate landmarks and identify insertion site (Medial/proximal tibia below the joint space and away from the bone ends).
4. Using aseptic technique, prepare the injection site (alcohol, betadine and alcohol).
5. Adjust the trocar depth (age dependant).
6. Position the device firmly on the site at a right angle to the bone and slightly caudal.
7. Deploy the device per manufacturer specifications.
8. Confirm proper positioning in the medullary space:
  - a. The needle should stand without support.
  - b. After removing the trocar and attaching a 10cc syringe to the device, aspiration should produce a blood/marrow mixture.
9. Attach IV tubing to needle and begin administration (fluid should flow freely).
10. Check for extravasation.
11. Secure needle and tubing.
12. Observe for complications.
13. Notify medical control of successful placement and location.
14. Needle size, location and any difficulties with insertion should be recorded on the patient care form.
15. All ALS Drugs and fluids may be given through the IO device.